C++ ASSIGNMENT

1.Ques :Calculate the product of all the elements in the given array.

Ans:

```
#include<iostream>
using namespace std;
int main() {
	int n;
	cin>>n;
	int arr[n];
	for(int i=0;i<n;i++){
		cin>>arr[i];
	}
	int prod=1;
	for(int i=0;i<n;i++){
		prod*=arr[i];
	}
	cout<<prod;
	return 0;
}
```

2.Ques :Find the second largest element in the given Array in one pass.

Ans:

```
#include<iostream>
using namespace std;
int main() {
	int n;
	cin>>n;
	int arr[n];
```

```
    for(int i=0;i<n;i++){
        cin>>arr[i];
    }
    int max=INT_MIN;
    int Smax=INT_MIN;
    for(int i=0;i<n;i++){
        if(arr[i]>max){
            max=arr[i];
        }
    }
    for(int i=0;i<n;i++){
        if(arr[i]>Smax&&arr[i]!=max){
            Smax=arr[i];
        }
    }
    cout<<Smax;
    return 0;
}
```

3.Ques :Find the minimum value out of all elements in the array.Find the minimum value out of all elements in the array.

Ans:

```
#include<iostream>
using namespace std;
int main() {
    int n;
    cin>>n;
    int arr[n];
    for(int i=0;i<n;i++){
        cin>>arr[i];
    }
    int min=INT_MAX;
```

```
    for(int i=0;i<n;i++){
        if(arr[i]<min){
            min=arr[i];
        }
    }
    cout<<min;
    return 0;
}
```

4.Ques: Given an array, predict if the array contains duplicates or not.

Ans:

```
#include<iostream>
using namespace std;
int main() {
    int n;
    cin>>n;
    int arr[n];
    for(int i=0;i<n;i++){
        cin>>arr[i];
    }
    bool flag=false;
    for(int i=0;i<n;i++){
    for(int j=i+1;j<n;j++){
        if(arr[j]==arr[i]){
            flag=true;
            cout<<arr[i];
            break;
        }
    }
}
    if(flag==false) cout<<"not dup";
```

```
    return 0;
}
```

5.Ques:WAP to find the smallest missing positive element in the sorted Array that contains only positive elements.

Ans:

```
#include<iostream>
using namespace std;
int main() {
    int n;
    cin>>n;
    int arr[n];
    for(int i=0;i<n;i++){
        cin>>arr[i];
    }
    int x=0;
    bool flag=false;
    for(int i=0;i<n;i++){
        if(arr[i]!=x){
          flag=true;
            cout<<x<<endl;
            break;
    }
    else x++;
}
    if(flag==false) cout<<x<<endl;
    return 0;
}
```

6.Ques:Predict the output.

```
int main()
{
```

```
int sub[50], i ;
for ( i = 0 ; i <= 48 ; i++ ) ;
{
sub[i] = i ;
cout<<sub[i]<<endl ;
}
return 0;
}
```

Ans: 49